

*Traffic
and
Zone
Products*

HOTLINE® FAST DRY LATEX TRAFFIC MARKING PAINT

TM2152
TM2153

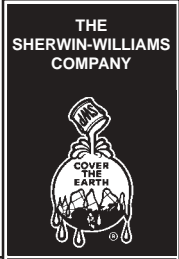
WHITE
LEAD FREE YELLOW

INDUSTRIAL
& MARINE
COATINGS

PRODUCT INFORMATION

Revised 12/03

PRODUCT DESCRIPTION		RECOMMENDED USES																																																																									
<p>HOTLINE LATEX TRAFFIC PAINTS are very fast drying paints for use in marking parking lots, airports, and roads. TM2152 and TM2153 may be applied ambient airless or conventional, or may be heated for even faster dry. TM2152 and TM2153 conform to current VOC regulations and to the requirements of Federal Specification TT-P-1952D Types I and II, and dry to no pickup in less than ten minutes when properly applied at ambient conditions, or one to two minutes when heated to 140° to 150°F. High relative humidity has significantly less effect on the dry time of these products as compared to other latex traffic paints.</p>		<p>Use these products for marking airfields, highways, or parking lots when faster dry times are needed and water based or low VOC coatings are required. These products are less affected by relative humidity than most latex paints, and are ideal for striping when very fast dry times are required.</p> <ul style="list-style-type: none"> • Striping contractors • Shopping centers • Plant maintenance • Streets and highways • Municipalities • Parking lots • State DOTs 																																																																									
PRODUCT CHARACTERISTICS		PERFORMANCE CHARACTERISTICS																																																																									
<p>Finish: Flat</p> <p>Color: White, Yellow</p> <p>Volume Solids: 60% minimum</p> <p>Weight Solids: 75% minimum</p> <p>VOC (EPA Method 24): 87 g/L; 0.73 lb/gal</p> <p>Recommended Spreading Rate per coat: Approximately 320 lineal feet of standard 4" stripe per gallon Wet mils: 15.0 Dry mils: 9.0 Coverage: 110 sq ft/gal approximate</p> <p>NOTE: Brush or roll application not recommended. If the asphalt is insufficiently cured, applying a thin coat (approximately 1/2 the recommended dft) generally reduces the extent of lifting and cracking.</p> <p>Drying Schedule @ 15.0 mils wet @ 50% RH: @ 77°F To touch: 10 minutes No traffic pickup after 10 minutes</p> <p>Drying time is temperature, humidity, and film thickness dependent.</p> <p>Shelf Life: 12 months, unopened Store indoors at 40°F to 100°F.</p> <p>Flash Point: 150°F, PMCC</p> <p>Reducer/Clean Up: Water</p>	<table border="1"> <thead> <tr> <th>TEST</th> <th>METHOD</th> <th>TT-P-1952D REQUIREMENTS</th> <th>RESULT</th> </tr> </thead> <tbody> <tr> <td>Abrasion Resistance (falling sand)</td> <td>ASTM D969 TT-P-1952D</td> <td>150 liters</td> <td>150 liters</td> </tr> <tr> <td>Bead Adhesion</td> <td>ASTM D969</td> <td>N/A</td> <td>150 liters</td> </tr> <tr> <td>Bleed Resistance</td> <td>ASTM D969 ASTM D968</td> <td>N/A</td> <td>8 minimum</td> </tr> <tr> <td>Bleed Ratio</td> <td>TT-P-1952D</td> <td>0.95 min</td> <td>0.96 min</td> </tr> <tr> <td>Color (yellow)</td> <td>Fed. Std. 595 #33538</td> <td>6 CIELAB</td> <td>pass</td> </tr> <tr> <td>Dry-No-Pickup</td> <td>ASTM D711</td> <td>10 minutes max.</td> <td>10 minutes</td> </tr> <tr> <td>Dry Opacity (Contrast ratio)</td> <td>Fed. Met. 141C at 5 mils wet</td> <td>0.92 minimum</td> <td>0.92 minimum</td> </tr> <tr> <td>Dry Through (early washout)</td> <td>TT-P-1952D</td> <td>2 hrs @ 90% RH</td> <td>2 hrs @ 90% RH</td> </tr> <tr> <td>Flash Point</td> <td>ASTM D3278</td> <td>N/A</td> <td>150°F</td> </tr> <tr> <td>Fineness of Grind</td> <td>ASTM D1210</td> <td>3 Hegman min.</td> <td>3 Hegman min.</td> </tr> <tr> <td>Flexibility</td> <td>TT-P-1952D</td> <td>Pass</td> <td>Pass</td> </tr> <tr> <td>Freeze-Thaw Resistance</td> <td>ASTM D2243</td> <td>3 cycles</td> <td>5 cycles</td> </tr> <tr> <td>Heat Shear Stability</td> <td>TT-P-1952D</td> <td>68 -105 KU</td> <td>68 -105 KU</td> </tr> <tr> <td>Reflectance (white only)</td> <td>ASTM-E97</td> <td>84% minimum</td> <td>84% minimum</td> </tr> <tr> <td>Scrub Resistance</td> <td>ASTM D2486</td> <td>500 cycles min.</td> <td>500 cycles min.</td> </tr> <tr> <td>Viscosity</td> <td>ASTM D562</td> <td>80 -90 KU</td> <td>80-90 KU</td> </tr> <tr> <td>Volatile Organic Compounds</td> <td>ASTM D3960 excluding water</td> <td>150 g per liter</td> <td>87 g/l 0.73 lbs/gal</td> </tr> </tbody> </table>	TEST	METHOD	TT-P-1952D REQUIREMENTS	RESULT	Abrasion Resistance (falling sand)	ASTM D969 TT-P-1952D	150 liters	150 liters	Bead Adhesion	ASTM D969	N/A	150 liters	Bleed Resistance	ASTM D969 ASTM D968	N/A	8 minimum	Bleed Ratio	TT-P-1952D	0.95 min	0.96 min	Color (yellow)	Fed. Std. 595 #33538	6 CIELAB	pass	Dry-No-Pickup	ASTM D711	10 minutes max.	10 minutes	Dry Opacity (Contrast ratio)	Fed. Met. 141C at 5 mils wet	0.92 minimum	0.92 minimum	Dry Through (early washout)	TT-P-1952D	2 hrs @ 90% RH	2 hrs @ 90% RH	Flash Point	ASTM D3278	N/A	150°F	Fineness of Grind	ASTM D1210	3 Hegman min.	3 Hegman min.	Flexibility	TT-P-1952D	Pass	Pass	Freeze-Thaw Resistance	ASTM D2243	3 cycles	5 cycles	Heat Shear Stability	TT-P-1952D	68 -105 KU	68 -105 KU	Reflectance (white only)	ASTM-E97	84% minimum	84% minimum	Scrub Resistance	ASTM D2486	500 cycles min.	500 cycles min.	Viscosity	ASTM D562	80 -90 KU	80-90 KU	Volatile Organic Compounds	ASTM D3960 excluding water	150 g per liter	87 g/l 0.73 lbs/gal	<h3>COMPOSITION INFORMATION</h3> <p>Total Weight: 60% minimum by volume 75% minimum by weight</p> <p>Pigment Weight Percent: 60 to 62%</p> <p>Non-Volatile Vehicle: 40% minimum</p> <p>Vehicle Type: Acrylic Latex Polymer</p> <p>As per the requirements of TT-P-1952D, paragraph 3.1.2, these products do not contain mercury, lead, hexavalent chromium, toluene, chlorinated solvents, hydrolyzable chlorine derivatives, ethylene based glycol ethers or their acetates.</p>	
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COATINGS

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Cured Asphalt, Concrete, Brick, and other Surfaced Highways:

1 ct. Hotline Fast Dry Latex Marking Paint
@ 15 mils wet, 9.0 mils dft, approximately 320
lineal feet of standard 4" stripe per gallon

The systems listed above are representative of the product's use. Other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
Concrete: Cured, clean, dry, sound
Asphalt: Cured, clean, dry, sound
Brick: Cured, clean, dry, sound

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 50°F minimum, 110°F maximum
(air, surface, and material)
At least 5°F above dew point
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

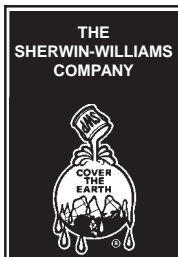
Packaging: 5 gallon containers

Weight per gallon:
White: 14.04 ± 0.2 lbs/gal
Yellow: 13.67 ± 0.2 lbs/gal

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.



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APPLICATION BULLETIN

Revised 12/03

SURFACE PREPARATION

Surfaces should be clean, dry and free from loose or peeling paint. Do not apply when air or surface temperatures are below 50°F, or when the relative humidity exceeds 85%, or when the temperature falls below the dew point.

The presence of concrete sealers or efflorescence on new concrete may interfere with adhesion and should be removed by extended weathering, etching, or abrasive blasting.

Most previously painted lines may be repainted without additional surface preparation, provided the old paint is still tightly adhered to the surface. However, multiple layers of paint will eventually peel and require removal.

New asphalt surfaces should ideally be allowed to age several months before striping. Latex paint will not bleed on most asphalt surfaces; however, shrinkage of the paint film during curing can cause new asphalt to lift or crack. Exceeding the recommended film thickness will increase the tendency to cause asphalt lifting. Placing an inconspicuous test stripe to determine if a new asphalt surface has cured sufficiently to paint is recommended.

If it is necessary to paint new asphalt surfaces, do not exceed an application rate of 8 mils wet (approximately 200 sq ft/gal). Special care should be given to laps and edges of stencils to prevent excessive film thickness.

APPLICATION CONDITIONS

Temperature: 50°F minimum, 110°F maximum
(air, surface, and material)
At least 5°F above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer/Clean Up Water

Airless Spray Line Striping Equipment

Pressure 1800 - 2700 psi
Hose 1/4" - 3/8" ID
Tip015" - .019"
Filter 60 mesh
Reduction As needed up to 12½% by volume

Conventional Spray Line Striping Equipment

Gun Binks 21 (Bleeder)
Fluid Nozzle #68
Air Nozzle Internal mix, #709
Atomization Pressure .. 20 - 80 psi
Fluid Pressure 30 - 60 psi
Reduction As needed up to 12½% by volume

Brush Not recommended

Roller Not recommended

NOTE: Fluid and atomization pressures are dependent on environmental conditions. Use the lowest pressures necessary to achieve a "flat line".

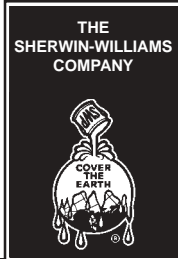
If the striping machine is also used for solvent based paints, care must be taken to prevent contamination of the paint types.

Heated air atomized spray may also be used to enhance the sprayability and to further decrease the dry time. If heat is used, the system must be designed to prevent paint temperatures from exceeding 160°F at any time.

Important: All metallic wetted parts must be stainless steel. Contact with brass, cold steel, and especially galvanized steel may cause gelation of the paint.

If specific application equipment is listed above, equivalent equipment may be substituted.

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APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly by boxing, stirring, or power agitation before use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

Approximately 320 lineal feet of standard 4" stripe per gallon

Wet mils: 15.0

Dry mils: 9.0

Coverage: 110 sq ft/gal approximate

NOTE: Brush or roll application not recommended.

If the asphalt is insufficiently cured, applying a thin coat (approximately 1/2 the recommended dft) generally reduces the extent of lifting and cracking.

Drying Schedule @ 15.0 mils wet @ 50% RH:

@ 77°F

To touch: 10 minutes

No traffic pickup after 10 minutes

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

PERFORMANCE TIPS

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.

Asphalt surfaces generally require aging prior to painting.

If the asphalt is insufficiently cured, applying a thin coat (approximately 1/2 the recommended dft) generally reduces the extent of lifting and cracking.

Check adhesion by applying a test strip to determine the readiness for painting.

The coating may be made into reflective paint by dropping on glass beads while the paint is still wet.

Painted surfaces can become slippery when wet. Traffic paints are not intended for use as floor paints, and should not be used to paint large areas subject to pedestrian traffic. For instance, painting an entire traffic stall is not recommended.

Heated air atomized spray may also be used to enhance the sprayability and to further decrease the dry time. If heat is used, the system must be designed to prevent paint temperatures from exceeding 160°F at any time.

Do not paint on wet surfaces.

Do not paint when the relative humidity is above 85%.

Do not paint when the temperature is below 50°F.

Cool, damp conditions will prolong the drying time.

Refer to Product Information sheet for additional performance characteristics and properties.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturers' safety recommendations when using mineral spirits.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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The statements made herein are based on our research and/or the research of others believed to be accurate.

No guarantee of their accuracy is made however, and such statements may be changed without notice.

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